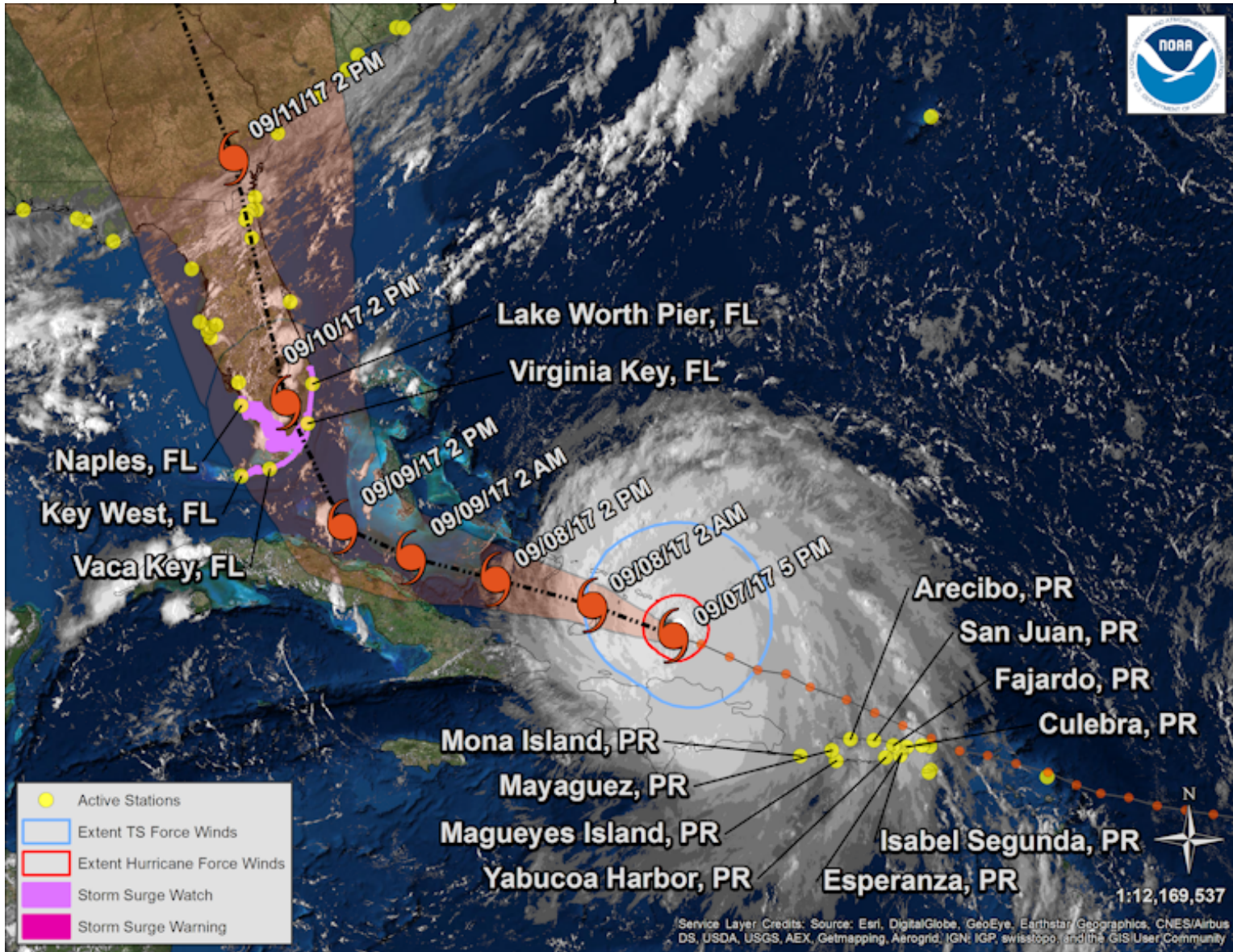




Hurricane IRMA QuickLook  
Posted: 18:00 AST 09/07/2017

#### NOAA and NOAA Partnership Stations Relative to the Storm



#### Storm Analysis

As of 09/07/2017 18:00 AST, water levels across Puerto Rico are measuring between 0 and 0.7 feet above normal as Irma continues to move away from the Island. Water levels from Naples to Lake Worth Pier, FL are only slightly higher than predictions at this time.

Winds around Puerto Rico continue to decrease and barometric pressure has returned to normal. Wind gusts in Florida remain below 10 knots.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst: AC

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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

Hurricane Irma Advisory Number 35  
NWS National Hurricane Center Miami FL  
500 PM EDT Thu Sep 07 2017

...EXTREMELY DANGEROUS HURRICANE IRMA VERY NEAR THE TURKS AND CAICOS ISLANDS AND  
HEADING FOR THE BAHAMAS...  
...HURRICANE CONDITIONS ARE EXPECTED ALONG PORTIONS OF THE NORTH COAST OF CUBA...

SUMMARY OF 500 PM EDT...2100 UTC...INFORMATION

-----  
LOCATION...20.9N 71.1W  
ABOUT 40 MI...65 KM S OF GRAND TURK ISLAND  
ABOUT 135 MI...220 KM E OF GREAT INAGUA ISLAND  
MAXIMUM SUSTAINED WINDS...175 MPH...280 KM/H  
PRESENT MOVEMENT...WNW OR 285 DEGREES AT 16 MPH...26 KM/H  
MINIMUM CENTRAL PRESSURE...922 MB...27.23 INCHES

WATCHES AND WARNINGS

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CHANGES WITH THIS ADVISORY:

The government of Cuba has issued a Hurricane Warning for the Cuban provinces of Camaguey, Ciego de Avila, Sancti Spiritus, and Villa Clara. This includes the Cuban Keys along the north shore of these provinces.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Storm Surge Watch is in effect for...

- \* Jupiter Inlet southward around the Florida peninsula to Bonita Beach
- \* Florida Keys

A Hurricane Warning is in effect for...

- \* Dominican Republic from Cabo Engano to the northern border with Haiti
- \* Haiti from the northern border with the Dominican Republic to Le Mole St. Nicholas
- \* Southeastern Bahamas and the Turks and Caicos Islands
- \* Cuban provinces of Camaguey, Ciego de Avila, Sancti Spiritus and Villa Clara.
- \* Central Bahamas

\* Northwestern Bahamas

A Hurricane Watch is in effect for...

- \* Jupiter Inlet southward around the Florida peninsula to Bonita Beach
- \* Florida Keys
- \* Lake Okeechobee
- \* Florida Bay
- \* Cuban provinces of Guantanamo, Holguin, Las Tunas and Matanzas.

A Tropical Storm Warning is in effect for...

- \* Dominican Republic from south of Cabo Engano westward to the southern border with Haiti
- \* Haiti from south of Le Mole St. Nicholas to Port-Au-Prince
- \* Cuban provinces of Guantanamo, Holguin, Las Tunas.

A Storm Surge Watch means there is a possibility of life-threatening inundation, from rising water moving inland from the coastline, in the indicated locations during the next 48 hours. For a depiction of areas at risk, please see the National Weather Service Storm Surge Watch/Warning Graphic, available at [hurricanes.gov](http://hurricanes.gov).

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. Preparations to protect life and property should be rushed to completion.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area.

Interests elsewhere in Cuba and Florida should monitor the progress of Irma.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside the United States, please monitor products issued by your national meteorological service.

## DISCUSSION AND 48-HOUR OUTLOOK

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At 500 PM EDT (2100 UTC), the distinct eye of Hurricane Irma was located near latitude 20.9 North, longitude 71.1 West. Irma is moving toward the west-northwest near 16 mph (26 km/h), and this general motion is expected to continue for the next couple of days with some decrease in forward speed. On the forecast track, the eye of Irma should continue to move between Hispaniola and the Turks and Caicos Islands this evening. The core of the hurricane will then move between the north coast of Cuba and the Bahamas during the next day or two.

Maximum sustained winds remain near 175 mph (280 km/h) with higher gusts. Irma is a category 5 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some fluctuations in intensity are likely during the next day or two, but Irma is forecast to remain a powerful category 4 or 5 hurricane during the next couple of days.

Hurricane-force winds extend outward up to 70 miles (110 km) from the center and tropical-storm-force winds extend outward up to 185 miles (295 km).

The estimated minimum central pressure is 922 mb (27.23 inches).

## HAZARDS AFFECTING LAND

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**STORM SURGE:** The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water is expected to reach the following **HEIGHTS ABOVE GROUND** if the peak surge occurs at the time of high tide...

Jupiter Inlet to Bonita Beach, including Florida Keys...5 to 10 ft

The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and destructive waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

The combination of a life-threatening storm surge and large breaking waves will raise water levels **ABOVE NORMAL TIDE LEVELS** by the following amounts within the hurricane warning area near and to the north of the center of Irma. Near the coast, the surge will be accompanied by large and destructive waves.

Turks and Caicos Islands...15 to 20 ft

Southeastern and central Bahamas...15 to 20 ft

Northwestern Bahamas...5 to 10 ft

Northern coast of the Dominican Republic...3 to 5 ft

Northern coast of Haiti and the Gulf of Gonave...1 to 3 ft

Northern coast of Cuba in the warning area...5 to 10 ft

**WIND:** Hurricane conditions are expected to continue within the hurricane warning area in the Dominican Republic and Haiti tonight. Hurricane conditions already affecting the Turks and Caicos Islands. Tropical storm and hurricane conditions are beginning in the southeastern Bahamas and will spread into the central Bahamas by tonight or early Friday. Hurricane conditions are expected within the hurricane warning area along the north coast of Cuba late Friday and Saturday. Hurricane conditions are expected in the northwestern Bahamas Friday night and Saturday.

Hurricane conditions are possible within the watch area in Florida by Sunday, with tropical storm conditions possible by late Saturday.

**RAINFALL:** Irma is expected to produce the following rain accumulations through Saturday evening:

Northeast Puerto Rico and the British and U.S. Virgin Islands... additional 1 to 2 inches

Much of the Bahamas and Turks and Caicos...8 to 12 inches, isolated 20 inches

Andros Island and Bimini, Bahamas...12 to 16 inches, isolated 25 inches

Northern Dominican Republic and northern Haiti...4 to 10 inches, isolated 15 inches

Southern Dominican Republic and southern Haiti...2 to 5 inches

Eastern and central Cuba...4 to 10 inches, isolated 15 inches

Southeast Florida and the upper Florida Keys...8 to 12 inches, isolated 20 inches

Lower Florida Keys...2 to 5 inches

In all areas this rainfall may cause life-threatening flash floods and mudslides.

**SURF:** Swells generated by Irma are affecting the northern Leeward Islands, Puerto Rico, the Virgin Islands, the southeastern Bahamas, the Turks and Caicos Islands, the northern coast of the Dominican Republic, and should start affecting portions of the southeast coast of the United States later today and tonight. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

## NEXT ADVISORY

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Next intermediate advisory at 800 PM EDT.

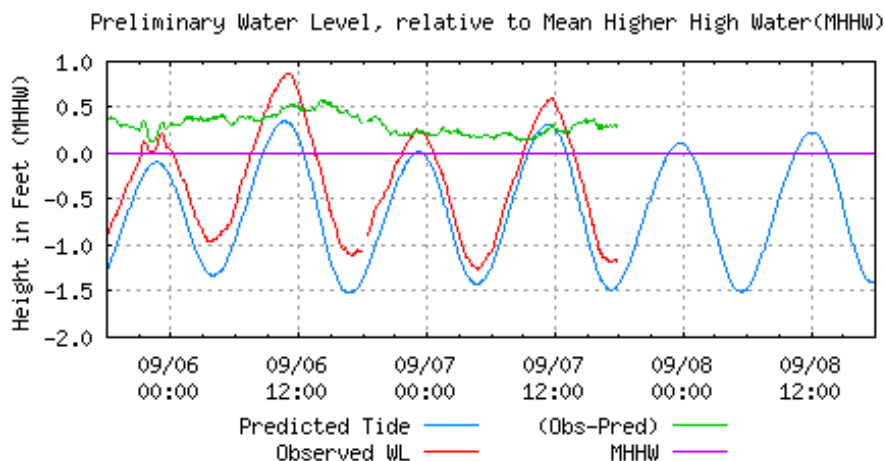
Next complete advisory at 1100 PM EDT.

Forecaster Avila

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Key West - Water Level](#), [Key West - Winds](#), [Vaca Key - Water Level](#), [Vaca Key - Winds](#), [Virginia Key - Water Level](#), [Virginia Key - Winds](#), [Naples - Water Level](#), [Lake Worth Pier - Water Level](#), [Mona Island - Water Level](#), [Mona Island - Barometric](#), [Mayaguez - Water Level](#), [Mayaguez - Winds](#), [Mayaguez - Barometric](#), [Magueyes Island - Water Level](#), [Magueyes Island - Winds](#), [Magueyes Island - Barometric](#), [San Juan, La Puntilla, San Juan Bay - Water Level](#), [San Juan, La Puntilla, San Juan Bay - Winds](#), [San Juan, La Puntilla, San Juan Bay - Barometric](#), [Yabucoa Harbor - Water Level](#), [Yabucoa Harbor - Winds](#), [Fajardo - Water Level](#), [Fajardo - Winds](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Esperanza, Vieques Island - Barometric](#), [Isabel Segunda, Vieques Island - Water Level](#), [Isabel Segunda, Vieques Island - Winds](#), [Culebra - Water Level](#), [Culebra - Barometric](#), [Arecibo - Water Level](#), [Arecibo - Winds](#)

NOAA/NOS/CO-OPS 8724580 Key West, FL



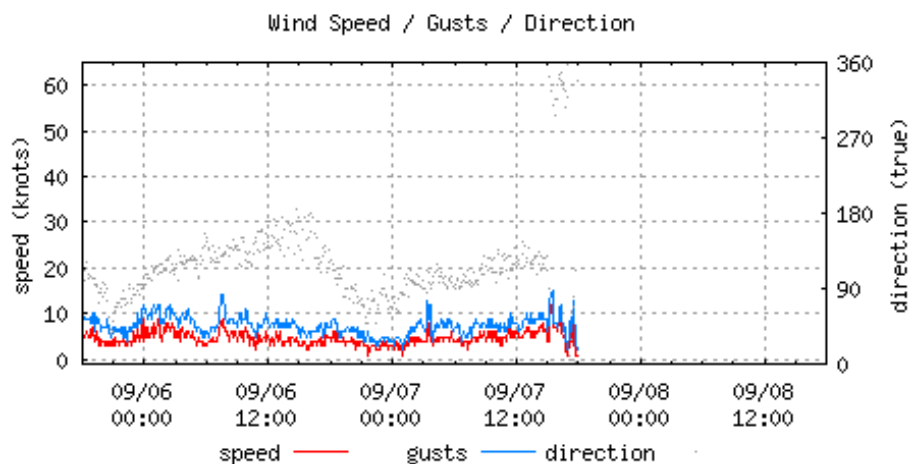
Last Observed Sample: 09/07/2017 18:00 (EDT). Data relative to MHHW

Observed: -1.17 ft. Predicted: -1.43 ft. Residual: 0.26 ft.

Historical Maximum Water Level: Oct 24 2005, 3.14 ft.

Next High Tide: 09/07/2017 23:44 (EDT), 0.11 ft.

NOAA/NOS/CO-OPS 8724580 Key West, FL

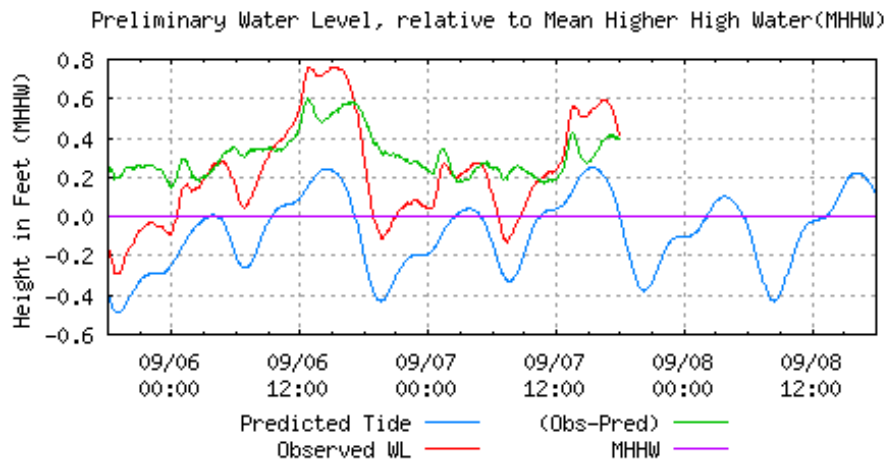


Last Observed Sample: 09/07/2017 18:00 (EDT)

Wind Speed: 2 knots Gusts: 3 knots Direction: 49° T



NOAA/NOS/CO-OPS 8723970 Vaca Key, FL



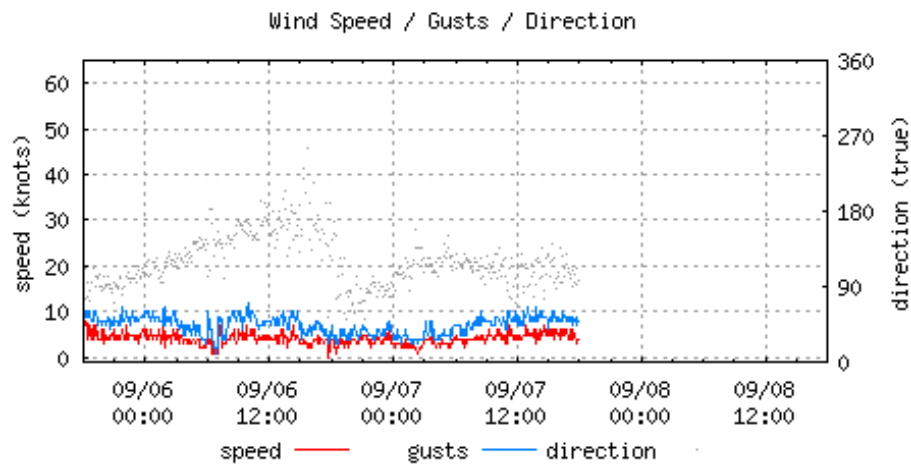
Last Observed Sample: 09/07/2017 18:00 (EDT). Data relative to MHHW

Observed: 0.39 ft. Predicted: -0.00 ft. Residual: 0.39 ft.

Historical Maximum Water Level: Oct 24 2005, 5.80 ft.

Next High Tide: 09/08/2017 03:46 (EDT), 0.10 ft.

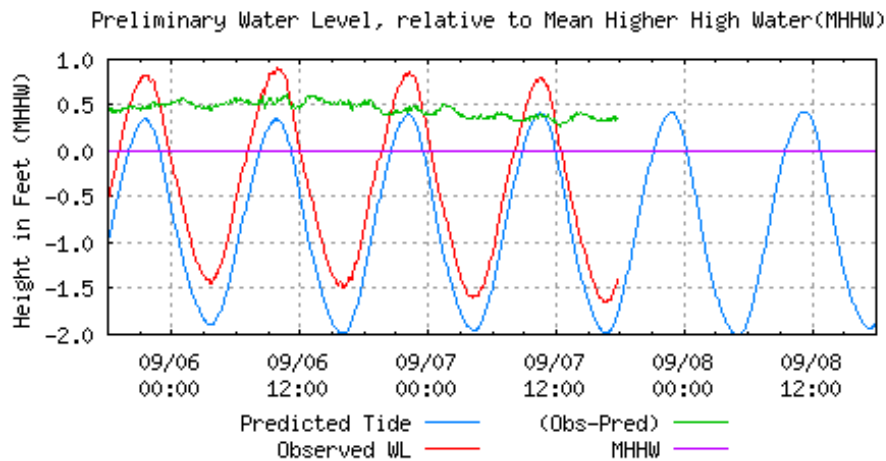
NOAA/NOS/CO-OPS 8723970 Vaca Key, FL



Last Observed Sample: 09/07/2017 18:00 (EDT)

Wind Speed: 5 knots Gusts: 8 knots Direction: 98° T

NOAA/NOS/CO-OPS 8723214 Virginia Key, FL



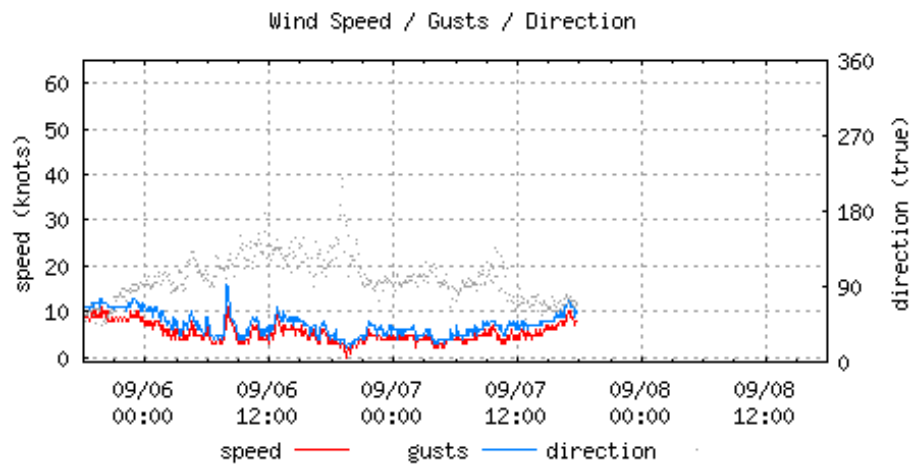
Last Observed Sample: 09/07/2017 17:54 (EDT). Data relative to MHHW

Observed: -1.36 ft. Predicted: -1.73 ft. Residual: 0.37 ft.

Historical Maximum Water Level: Oct 24 2005, 2.58 ft.

Next High Tide: 09/07/2017 22:48 (EDT), 0.41 ft.

NOAA/NOS/CO-OPS 8723214 Virginia Key, FL

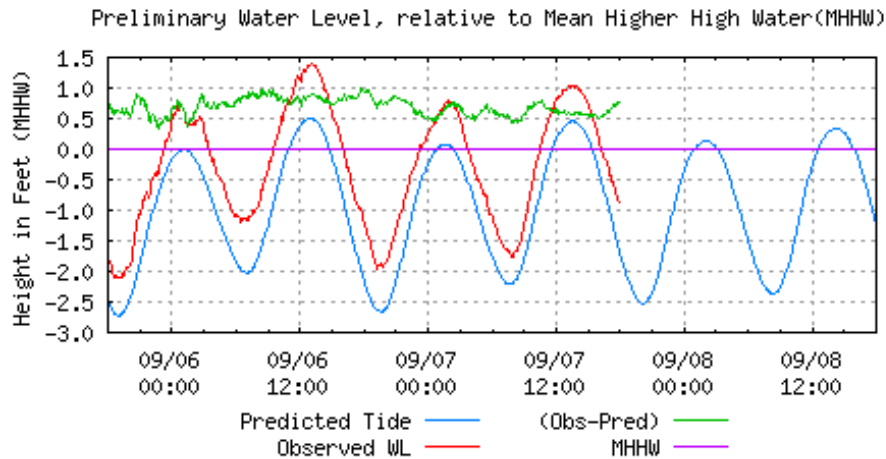


Last Observed Sample: 09/07/2017 17:54 (EDT)

Wind Speed: 9 knots Gusts: 11 knots Direction: 65° T



NOAA/NOS/CO-OPS 8725110 Naples, FL



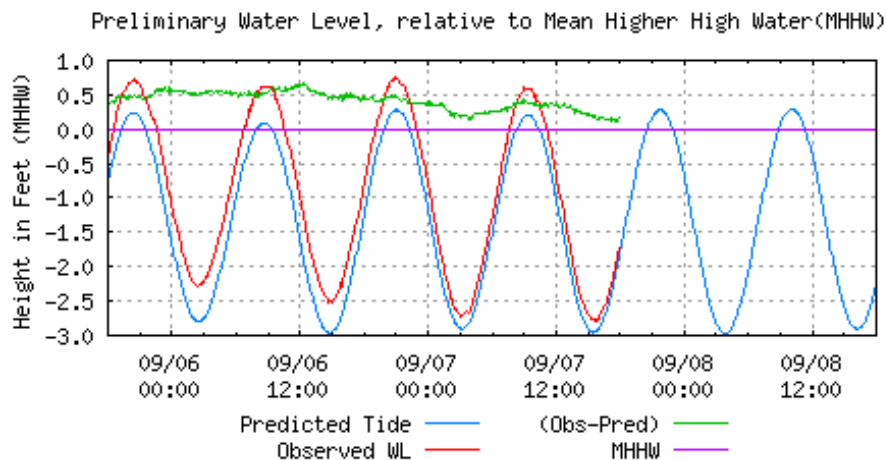
Last Observed Sample: 09/07/2017 18:00 (EDT). Data relative to MHHW

Observed: -0.94 ft. Predicted: -1.72 ft. Residual: 0.78 ft.

Historical Maximum Water Level: Dec 21 1972, 3.11 ft.

Next High Tide: 09/08/2017 02:04 (EDT), 0.14 ft.

NOAA/NOS/CO-OPS 8722670 Lake Worth Pier, FL



Last Observed Sample: 09/07/2017 18:00 (EDT). Data relative to MHHW

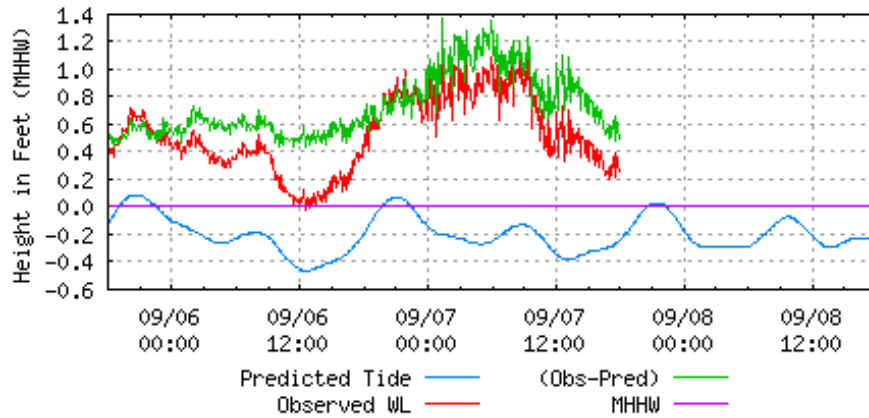
Observed: -1.64 ft. Predicted: -1.79 ft. Residual: 0.15 ft.

Historical Maximum Water Level: Oct 28 2012, 2.00 ft.

Next High Tide: 09/07/2017 21:44 (EDT), 0.28 ft.

NOAA/NOS/CO-OPS 9759938 Mona Island, PR

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Last Observed Sample: 09/07/2017 18:00 (AST). Data relative to MHHW

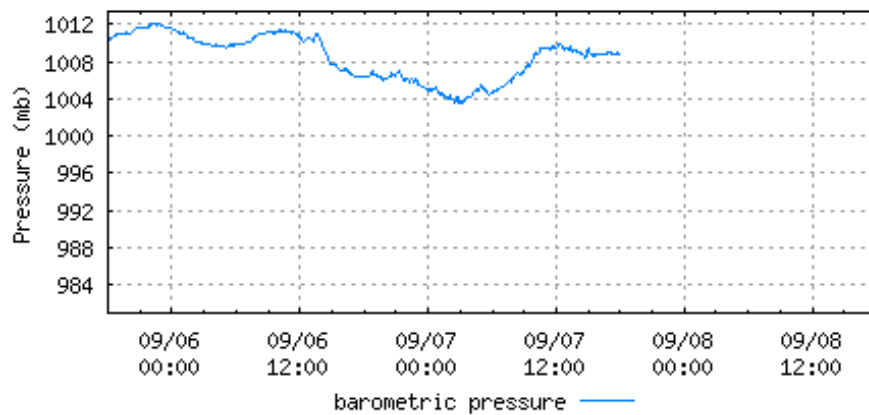
Observed: 0.20 ft. Predicted: -0.24 ft. Residual: 0.44 ft.

Historical Maximum Water Level: Dec 23 2010, 1.24 ft.

Next High Tide: 09/07/2017 21:27 (AST), 0.03 ft.

NOAA/NOS/CO-OPS 9759938 Mona Island, PR

Barometric Pressure

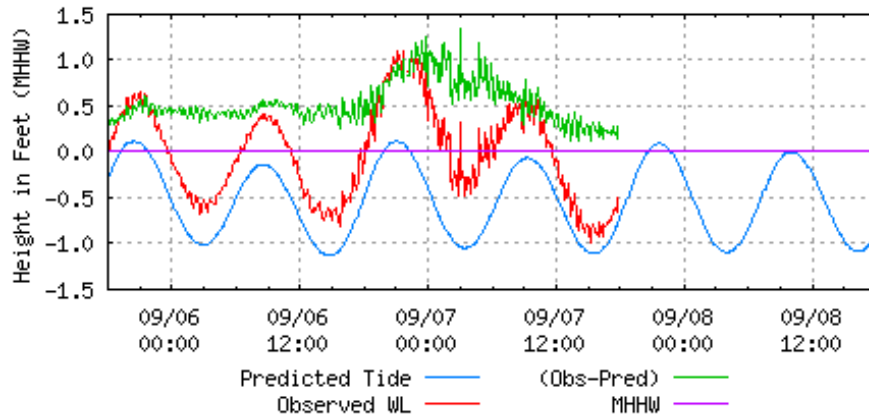


Last Observed Sample: 09/07/2017 18:00 (AST)

Barometric Pressure: 1009.0 mb

NOAA/NOS/CO-OPS 9759394 Mayaguez, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/07/2017 17:54 (AST). Data relative to MHHW

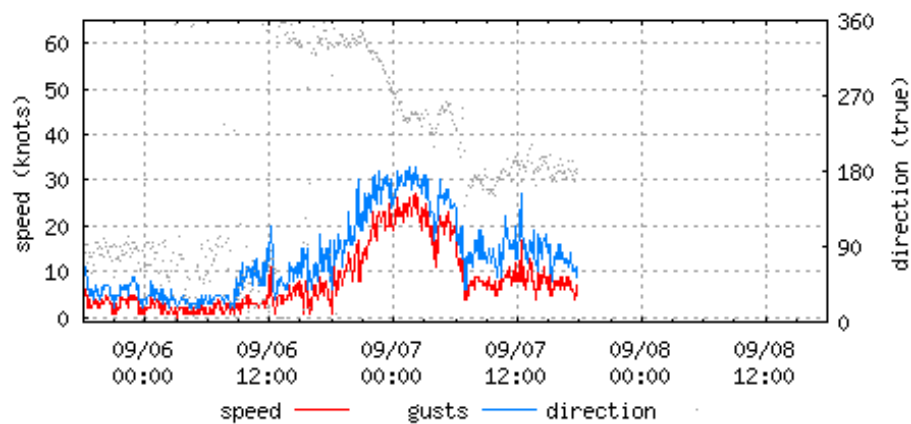
Observed: -0.55 ft. Predicted: -0.74 ft. Residual: 0.19 ft.

Historical Maximum Water Level: Oct 1 2015, 0.99 ft.

Next High Tide: 09/07/2017 21:39 (AST), 0.09 ft.

NOAA/NOS/CO-OPS 9759394 Mayaguez, PR

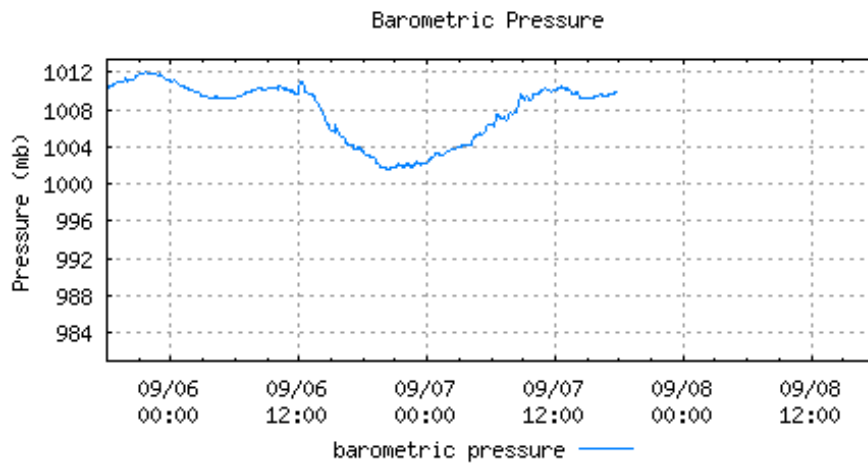
Wind Speed / Gusts / Direction



Last Observed Sample: 09/07/2017 17:54 (AST)

Wind Speed: 7 knots Gusts: 11 knots Direction: 176° T

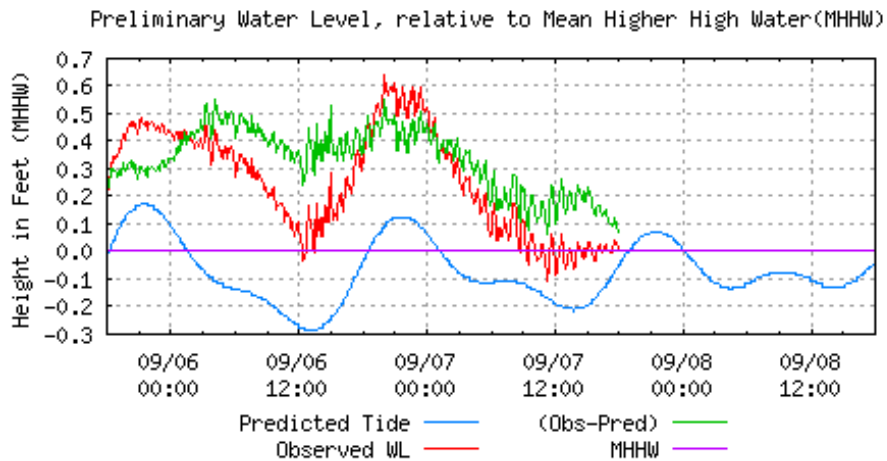
NOAA/NOS/CO-OPS 9759394 Mayaguez, PR



Last Observed Sample: 09/07/2017 17:54 (AST)

Barometric Pressure: 1009.8 mb

NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR



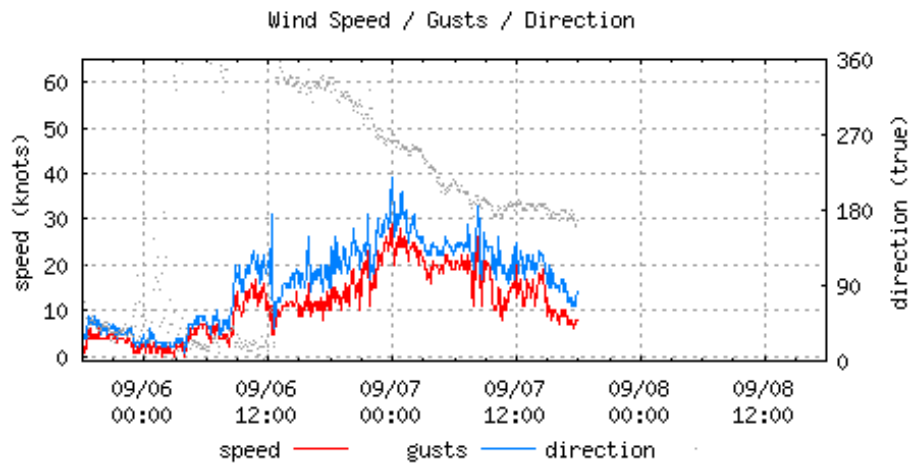
Last Observed Sample: 09/07/2017 17:54 (AST). Data relative to MHHW

Observed: 0.01 ft. Predicted: -0.06 ft. Residual: 0.07 ft.

Historical Maximum Water Level: Sep 22 1998, 1.60 ft.

Next High Tide: 09/07/2017 21:26 (AST), 0.07 ft.

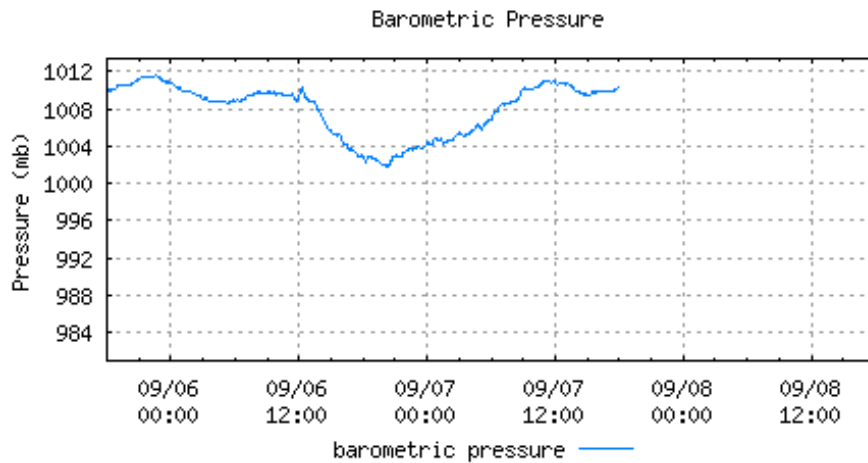
NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR



Last Observed Sample: 09/07/2017 17:54 (AST)

Wind Speed: 8 knots Gusts: 14 knots Direction: 167° T

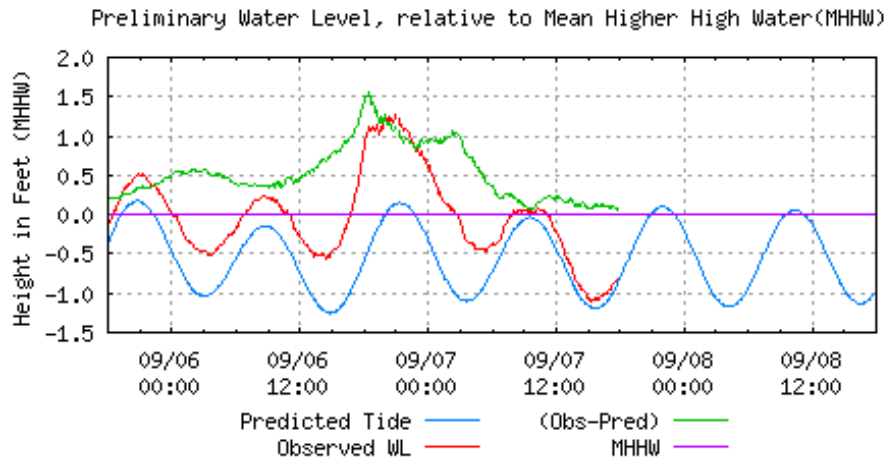
NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR



Last Observed Sample: 09/07/2017 17:54 (AST)

Barometric Pressure: 1010.3 mb

NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR



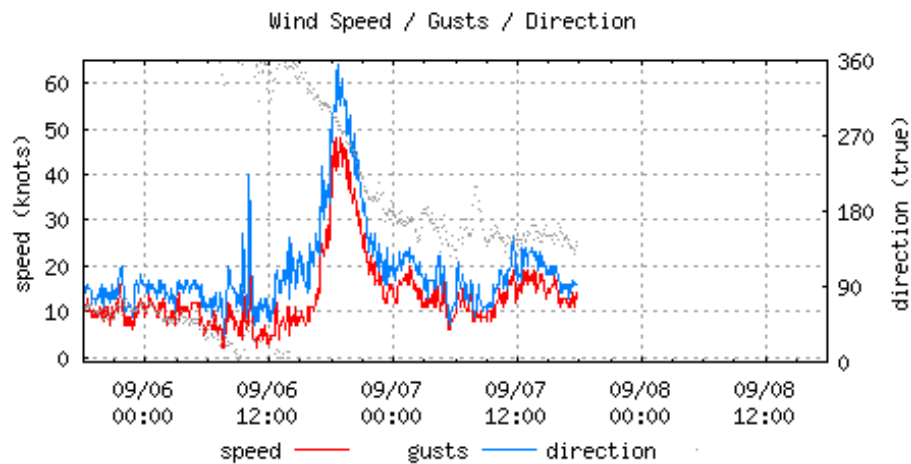
Last Observed Sample: 09/07/2017 17:54 (AST). Data relative to MHHW

Observed: -0.78 ft. Predicted: -0.83 ft. Residual: 0.05 ft.

Historical Maximum Water Level: Sep 18 1989, 2.77 ft.

Next High Tide: 09/07/2017 21:58 (AST), 0.10 ft.

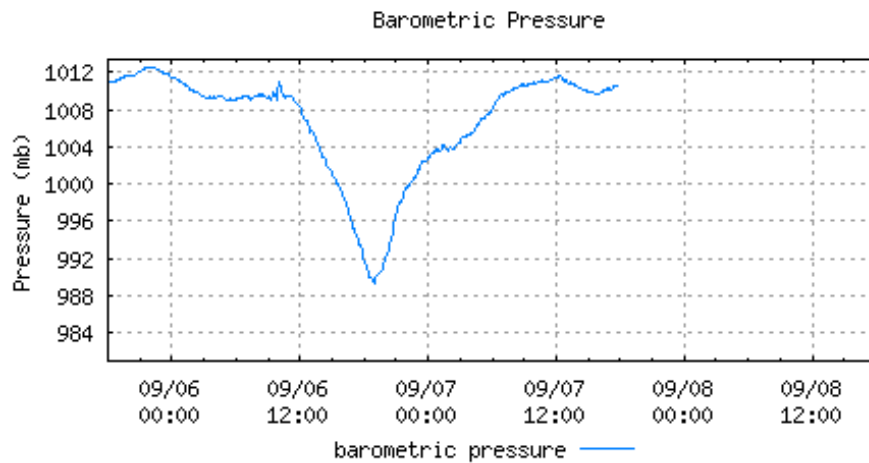
NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR



Last Observed Sample: 09/07/2017 17:54 (AST)

Wind Speed: 11 knots Gusts: 14 knots Direction: 140° T

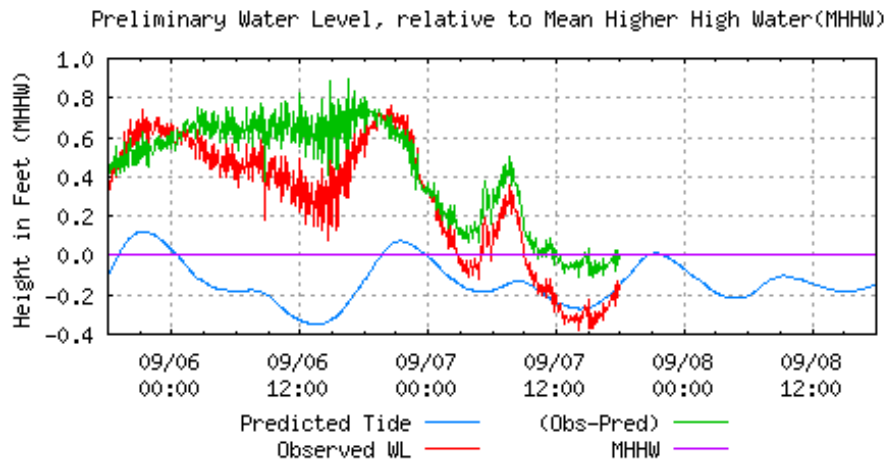
NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR



Last Observed Sample: 09/07/2017 17:54 (AST)

Barometric Pressure: 1010.6 mb

NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR



Last Observed Sample: 09/07/2017 18:00 (AST). Data relative to MHHW

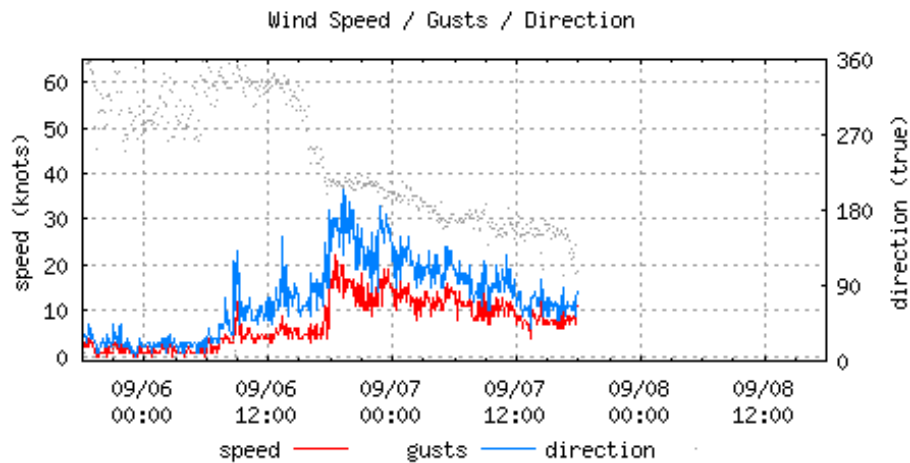
Observed: -0.09 ft. Predicted: -0.16 ft. Residual: 0.07 ft.

Historical Maximum Water Level: n/a

Next High Tide: 09/07/2017 21:20 (AST), 0.01 ft.



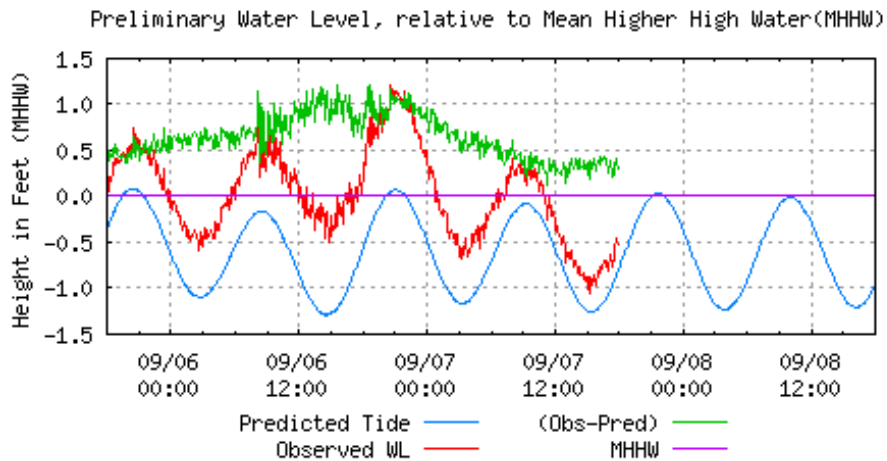
NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR



Last Observed Sample: 09/07/2017 18:00 (AST)

Wind Speed: 11 knots Gusts: 13 knots Direction: 123° T

NOAA/NOS/CO-OPS 9753216 Fajardo, PR



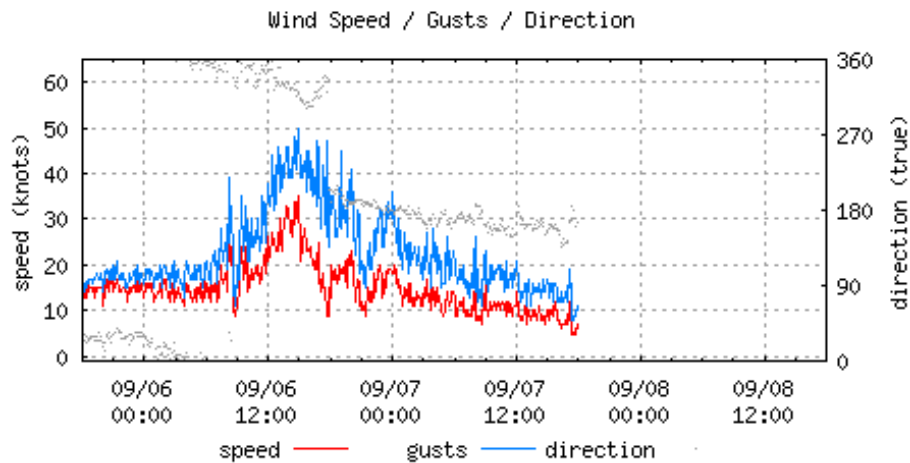
Last Observed Sample: 09/07/2017 18:00 (AST). Data relative to MHHW

Observed: -0.50 ft. Predicted: -0.79 ft. Residual: 0.29 ft.

Historical Maximum Water Level: Aug 30 2010, 0.84 ft.

Next High Tide: 09/07/2017 21:38 (AST), 0.03 ft.

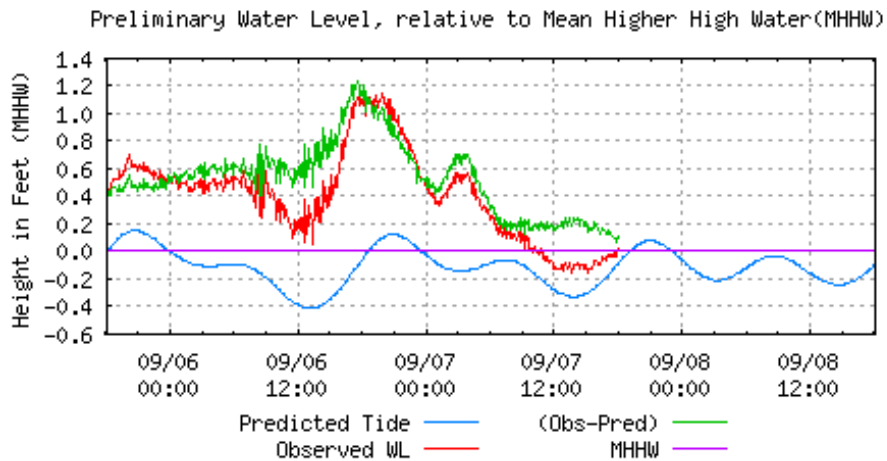
NOAA/NOS/CO-OPS 9753216 Fajardo, PR



Last Observed Sample: 09/07/2017 18:00 (AST)

Wind Speed: 6 knots Gusts: 9 knots Direction: 160° T

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR



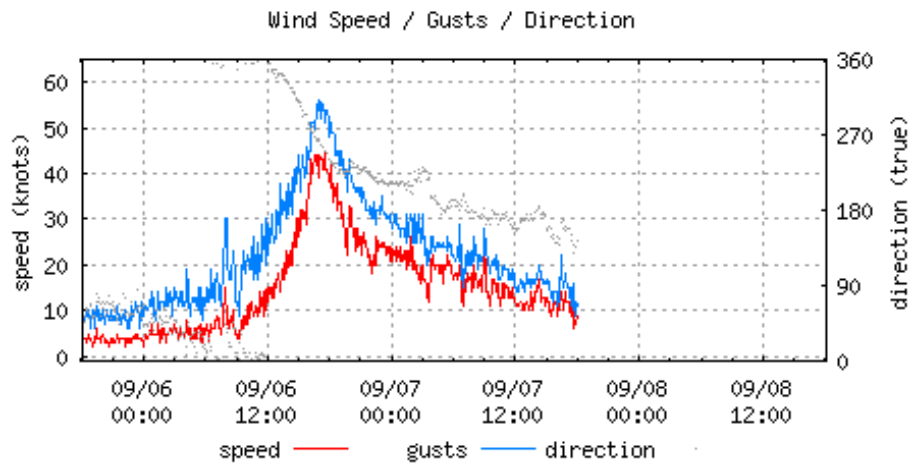
Last Observed Sample: 09/07/2017 18:00 (AST). Data relative to MHHW

Observed: 0.02 ft. Predicted: -0.09 ft. Residual: 0.11 ft.

Historical Maximum Water Level: Aug 22 2011, 0.99 ft.

Next High Tide: 09/07/2017 21:01 (AST), 0.08 ft.

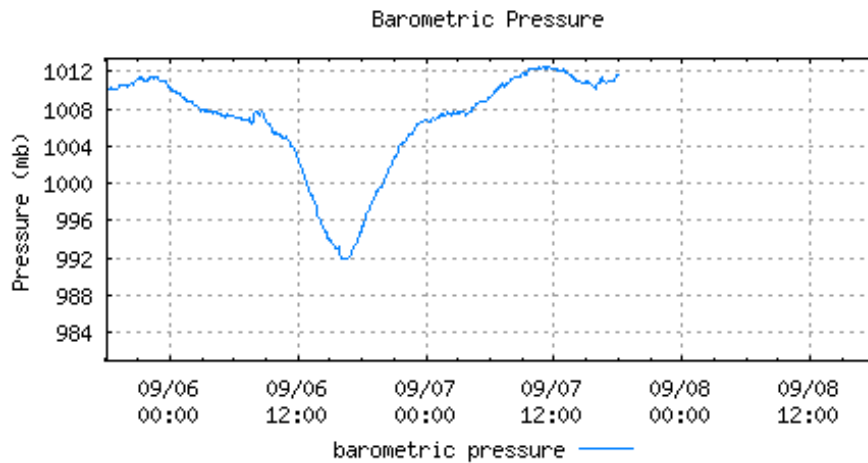
NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR



Last Observed Sample: 09/07/2017 18:00 (AST)

Wind Speed: 9 knots Gusts: 11 knots Direction: 144° T

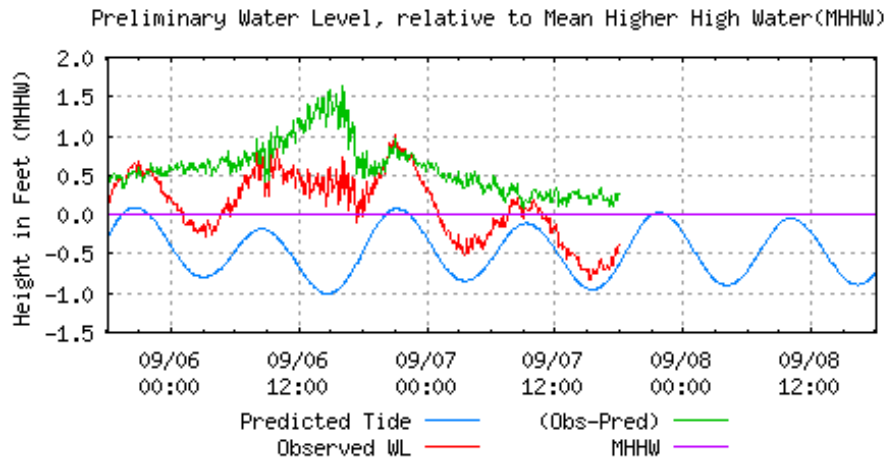
NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR



Last Observed Sample: 09/07/2017 18:00 (AST)

Barometric Pressure: 1011.6 mb

NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR



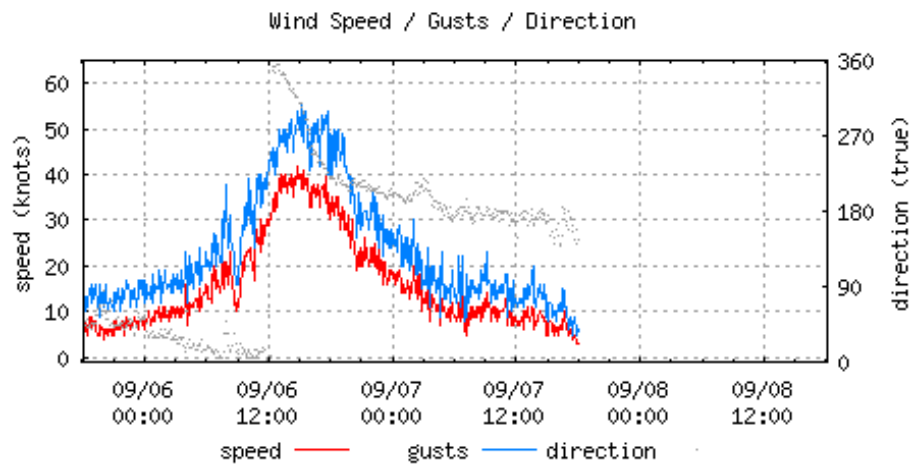
Last Observed Sample: 09/07/2017 18:00 (AST). Data relative to MHHW

Observed: -0.38 ft. Predicted: -0.64 ft. Residual: 0.26 ft.

Historical Maximum Water Level: n/a

Next High Tide: 09/07/2017 21:45 (AST), 0.03 ft.

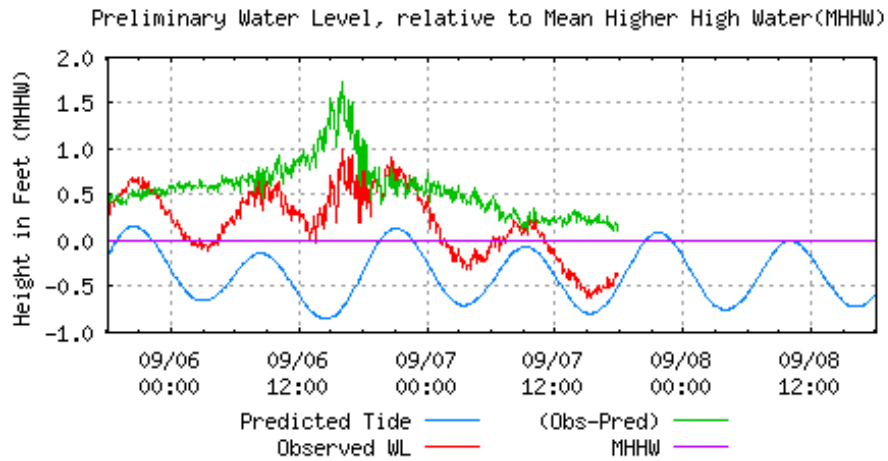
NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR



Last Observed Sample: 09/07/2017 18:00 (AST)

Wind Speed: 3 knots Gusts: 6 knots Direction: 146° T

NOAA/NOS/CO-OPS 9752235 Culebra, PR



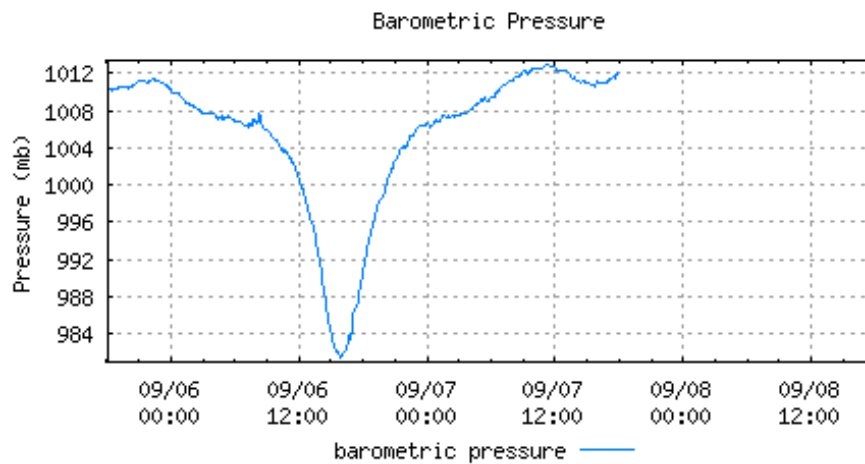
Last Observed Sample: 09/07/2017 17:54 (AST). Data relative to MHHW

Observed: -0.38 ft. Predicted: -0.50 ft. Residual: 0.12 ft.

Historical Maximum Water Level: Nov 6 2006, 0.84 ft.

Next High Tide: 09/07/2017 21:39 (AST), 0.09 ft.

NOAA/NOS/CO-OPS 9752235 Culebra, PR

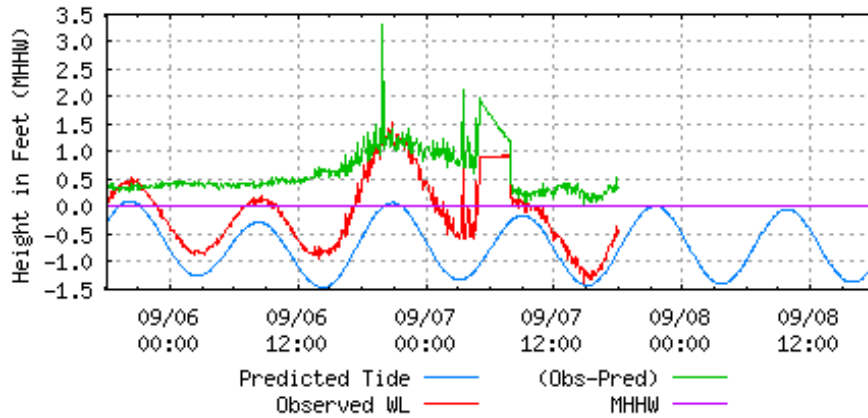


Last Observed Sample: 09/07/2017 17:54 (AST)

Barometric Pressure: 1011.9 mb

NOAA/NOS/CO-OPS 9757809 Arecibo, PR

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Last Observed Sample: 09/07/2017 18:00 (AST). Data relative to MHHW

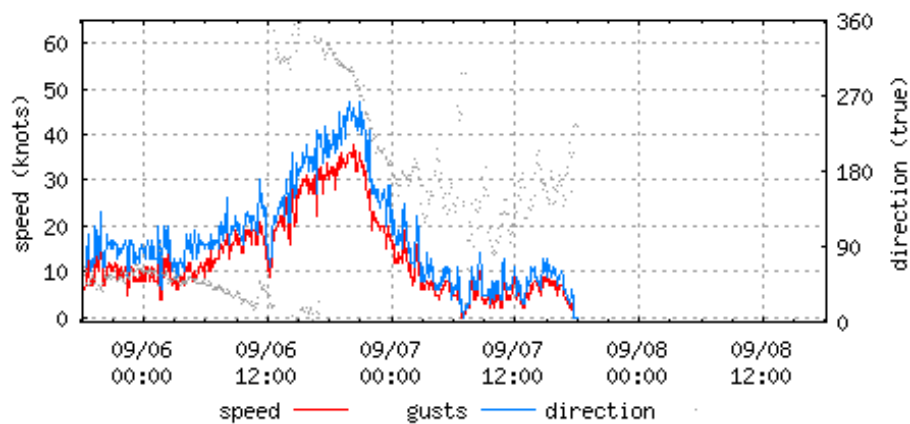
Observed: -0.44 ft. Predicted: -0.81 ft. Residual: 0.37 ft.

Historical Maximum Water Level: Oct 8 2010, 0.90 ft.

Next High Tide: 09/07/2017 21:29 (AST), 0.01 ft.

NOAA/NOS/CO-OPS 9757809 Arecibo, PR

Wind Speed / Gusts / Direction



Last Observed Sample: 09/07/2017 18:00 (AST)

Wind Speed: 0 knots Gusts: 0 knots Direction: 233° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8724580	Key West, FL	09/07/2017 18:00 (EDT)	-1.17 ft	-1.43 ft	0.26 ft	0.60 ft
8723970	Vaca Key, FL	09/07/2017 18:00 (EDT)	0.39 ft	-0.00 ft	0.39 ft	0.60 ft
8723214	Virginia Key, FL	09/07/2017 17:54 (EDT)	-1.36 ft	-1.73 ft	0.37 ft	0.87 ft
8725110	Naples, FL	09/07/2017 18:00 (EDT)	-0.94 ft	-1.72 ft	0.78 ft	1.04 ft
8722670	Lake Worth Pier, FL	09/07/2017 18:00 (EDT)	-1.64 ft	-1.79 ft	0.15 ft	0.77 ft
9759938	Mona Island, PR	09/07/2017 18:00 (AST)	0.20 ft	-0.24 ft	0.44 ft	1.17 ft
9759394	Mayaguez, PR	09/07/2017 17:54 (AST)	-0.55 ft	-0.74 ft	0.19 ft	1.11 ft
9759110	Magueyes Island, PR	09/07/2017 17:54 (AST)	0.01 ft	-0.06 ft	0.07 ft	0.64 ft
9755371	San Juan, La Puntilla, San Juan Bay, PR	09/07/2017 17:54 (AST)	-0.78 ft	-0.83 ft	0.05 ft	1.27 ft
9754228	Yabucoa Harbor, PR	09/07/2017 18:00 (AST)	-0.09 ft	-0.16 ft	0.07 ft	0.76 ft
9753216	Fajardo, PR	09/07/2017 18:00 (AST)	-0.50 ft	-0.79 ft	0.29 ft	1.21 ft
9752695	Esperanza, Vieques Island, PR	09/07/2017 18:00 (AST)	0.02 ft	-0.09 ft	0.11 ft	1.17 ft
9752619	Isabel Segunda, Vieques Island, PR	09/07/2017 18:00 (AST)	-0.38 ft	-0.64 ft	0.26 ft	1.02 ft
9752235	Culebra, PR	09/07/2017 17:54 (AST)	-0.38 ft	-0.50 ft	0.12 ft	0.92 ft
9757809	Arecibo, PR	09/07/2017 18:00 (AST)	-0.44 ft	-0.81 ft	0.37 ft	3.30 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
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